Quarterly Journal of Microscopical Science

QH
201
Q2

EDITORS
H. G. CALLAN
A. V. GRIMSTONE

VOLUME 106. Third Series

Published for the Company of Biologists Limited
OXFORD: AT THE CLARENDON PRESS
1965

CONTENTS

Volume 106, Part 1

J. R. Baker, Editor 1946 to 1964 1

Baker, J. R., and **Williams, E. G. M.** The use of methyl green as a histochemical reagent 3

Baker, J. R. The fine structure produced in cells by primary fixatives 2. Potassium dichromate 15

Bernard, G. R., and **Wynn, G. G.** The behaviour of tissue slices in chromate solutions: a study of the comparative importance of the tonicity and osmotic concentration of fixative systems 23

Dev, B. The cytochemical localization of alkaline phosphatase in the testicular nephridia of the Indian leech, *Hirudinaria granulosa*, with special reference to the inner lobe 31

Marshall, A. T. Spittle-production and tube-building by cercopoid nymphs (Homoptera). 3. The cytology and function of the fibril zone of the Malpighian tubules of tube-building nymphs 37

Laverack, M. S., and **Ardill, D. J.** The innervation of the aesthetasc hairs of *Panulirus argus* 45

Ashhurst, D. E. The connective tissue sheath of the locust nervous system: its development in the embryo 61

Watson, B. D. The fine structure of the body-wall in a free-living nematode, *Euchromadora vulgaris* 75

Watson, B. D. The fine structure of the body-wall and the growth of the cuticle in the adult nematode *Ascaris lumbricoides* 83

Firlit, C. F., and **Davis, J. R.** Morphogenesis of the residual body of the mouse testis 93

Ruthmann, A. The fine structure of RNA-storing archaeocytes from gemmules of fresh-water sponges 99

Lund, R. D. The staining of degeneration in the nervous system of the octopus by modified silver methods 115

Volume 106, Part 2

Rutherford, D. J., and **Horridge, G. A.** The rhabdom of the lobster eye 119

Horridge, G. A., and **Barnard, P. B. T.** Movement of palisade in locust retinula cells when illuminated 135

Nicholas, W. L., and **Mercer, E. H.** The ultrastructure of the tegument of *Moniliformis dubius* (Acanthocephala) 137

Dorey, A. E. The organization and replacement of the epidermis in acoelous turbellarians 147

Sumner, A. T. The cytology and histochemistry of the digestive gland cells of *Helix* 173

Bitensky, L., and **Cohen, S.** The histochemical demonstration of alkaline phosphatase in unfixed frozen sections 193

Volume 106, Part 3

Barnicot, N. A., and **Huxley, H. E.** Electron microscope observations on mitotic chromosomes 197

Macgregor, H. C. The role of lampbrush chromosomes in the formation of nucleoli in amphibian oocytes 215

Sims, R. T. The synthesis and migration of nuclear proteins during mitosis and differentiation of cells in rats 229

Maggi, V., and **Carbonell, A. W.** Localization of a bound lipid fraction in the pancreas of the mouse 241

Barber, V. C., and **Pilcher, C. W. T.** An enzyme histochemical and electron microscopical study of the light organ of the glow-worm, *Lampyris noctiluca* 247

Mills, R. P., and **King, R. C.** The pericardial cells of *Drosophila melanogaster* 261

Neville, A. C. Chitin lamellogenesis in locust cuticle 269

Volume 106, Part 4

Editorial 287

Ferguson, M. M. Observations on the histochemical distribution of alcohol dehydrogenase 289

Goldstein, D. J. A further note on the measurement of the affinity of a dye (Azure A) for histological substrates 299

Sassoon, H. F., and **Parsons, M. H. C.** Colour photomicrography of crystals in Brownian movement 307

Galbraith, W. An electrical counter for cell population studies 311

Neville, A. C. Circadian organization of chitin in some insect skeletons 315

Bradley, D. E. Observations on the mastigonemes of two *Chrysophyceae* using negative staining 327

Bannister, L. H. The fine structure of the olfactory surface of teleostean fishes 333

Hughes, G. M., and **Grimstone, A. V.** The fine structure of the secondary lamellae of the gills of *Gadus pollachius* 343